DOCUMENT RESUME

ED 141 270 SP 011 099

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TITLE Technical Assistance Outlines for Research Proposal Writers Conforming to Guidelines Derived from the FEDERAL REGISTER.
PUB DATE 5 Nov 76
NOTE 28p.; For related documents, see ED 120 617 and ED 123 241

EDRS PRICE MF-$0.83 HC-$2.06 Plus Postage.
DESCRIPTORS *Educational Research; *Evaluation Criteria; *Evaluation Methods; Evaluative Thinking; Formative Evaluation; Measurement Techniques; *Program Evaluation; *Research Criteria; *Research Methodology; Research Needs; Research Projects; Summative Evaluation

ABSTRACT

This provides the basic format to be followed for conducting a research project. The method of analyzing the procedure for making a successful research project is broken down into six components: (1) State the problem briefly and explain its importance and significance; (2) State the hypotheses to be tested and explain specific questions to be answered; (3) Summarize pertinent research in other related research by citing sources of special importance, discussing the proposed study as it relates to previous and ongoing research, specifying how the study will extend the body of knowledge, and pointing out distinctive or unique aspects of the proposed research; (4) Describe all important procedures in detail, listing steps to be followed and time lines for each step, and identifying all pertinent components involved in the research project; (5) Include data on personnel, facilities, duration, budget, support, related projects, and funding anticipations; and (6) Summarize by stating how this project will yield usable results in a reasonable period of time and if it can be used in a substantial number of similar activities. A list of avoidable research errors is included in this report. The appendixes give examples of federal criteria for federal research projects. (JD)

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TITLE

# TECHNICAL ASSISTANCE OUTLINES FOR RESEARCH PROPOSAL WRITERS CONFORMING TO GUIDELINES DERIVED FROM THE FEDERAL REGISTER

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NOTE

These materials are of such a nature as to supplement the following microfiche :

ED 120-617
ED 123-241

DATE

November 5, 1976

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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## SUMMARY


Two microfiche recently appeared in the ERIC system :

ED 120-617 OUTLINES USEFUL FOR PROVIDING TECHNICAL ASSISTANCE TO COMMUNITY EDUCATION PROGRAMS

ED 123-241 THE EVOLUTION OF AN EVALUATION DESIGN FOR EVALUATING SECONDARY PROGRAMS FOR THE DEAF IN VOCATIONAL-OCCUPATIONAL-TECHNICAL EDUCATION (V.O.T.E.) PROGRAMS

As a result of these two publications, the author has received several requests for REPRINTS AND ADDITIONAL INFORMATION IN RELATED FIELDS.

The materials contained in this publication respond to this field-based need.

SEE page 1

A BASIC CHECKLIST of components in a typical research proposal is included. Since personnel, facilities, duration, budget, support, agencies, related projects, and funding anticipations are normally developed in acceptable fashion in even the worst written research proposal, little emphasis has been given to these items.

INSTEAD, emphasis has been placed on statements of problem, objectives, other related research, and procedures. For each component, an indication of WHAT TO DO has been included.

SEE pages 2 - 6

PRODUCT ASSESSMENT has been simplified to seven steps and four related forms.

SEE pages 7 - 13 and 14 - 22.

For individuals responding to requests for proposals from the FEDERAL REGISTER, a number of self-evaluation questions have been included. Much of this material is available elsewhere in paragraph form. However, it was deemed a good idea to ASSEMBLE it in one place and to give AN EXAMPLE of how each paragraph of criteria can be routinely broken down into a number of discrete quality judgments.

The preceding page i was intended to give a generalized overview of what to expect in this document.

The next two pages are intended for the busy reader who simply can't take the time to go into the details referred to in pages 1 - 22.

Page iii is a list of AVOIDABLE RESEARCH ERRORS. For each common error, a prescription is given. Since each prescription is dependent upon a number of local circumstances, the more leisurely reader should go into greater depth as found in pages 1 - 6 before adopting such recommendations en masse.

Page iv is a listing of research styles. Logically page iii should be page 23. That's where it fits in as a conclusion. However, experience has convinced the author that many readers will never get that far.

The CONCLUSION obviously is : the SCIENTIFIC METHOD is often the most appropriate to any given research since it alone PERMITS "public inspection of the books."

> CHANCE, INTUITION, AUTHORITY, COMPROMISE, AND CONSENSUS all have their place, but research open to public inspection and participation offers more promise.

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THIS IS THE KIND OF RESEARCH
that gives most promise of
RESULTS that guarantee better teaching and better learning
IN A REASONABLE PERIOD OF TIME.

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THIS IS THE KIND OF RESEARCH
that most often results in
A SUBSTANTIAL NUMBER OF
IMPROVEMENTS IN CLASSROOMS OR IN OTHER LEARNING SITUATIONS
within five years after the termination date of the research.

## Avoidable Research Errors

| Error | Remedy |
|---|---|
| 1. Lack of a clear definition of the problem | 1a. Avoid ambiguous or confusing terms; for example, use a prediction statement when an hypothesis might be misunderstood<br>b. Take a position that can be proven or disproven |
| 2. Untestable hypothesis or prediction | 2a. Identify and probe terms that appear difficult to measure<br>b. Show how any accept-reject decision will be made |
| 3. Undefined terms | 3a. Develop a glossary of terms<br>b. Define each term operationally |
| 4. Contaminated sampling | 4a. Identify all data sources<br>b. Permit the general public and professional experts to criticize all data inputs before finalizing the design<br>c. Act appropriately to remedy by redesign or by randomization all perceived error sources in control and experimental data |
| 5. Invalid and unreliable instruments | 5a. Validate all instruments in light of research objectives and purposes<br>b. Check for reliability and accurate consistency<br>c. Build-in doublechecks for all new and untested "tools" |
| 6. Inaccurate coding | 6a. Scrutinize every step of the process whereby observations are converted into numbers or data categories<br>b. Verify that all data recording, copying, tabulation, and summarization procedures are error-proof<br>c. Mechanize whenever possible; for example, use programmable tools which minimize the possibility of clerk or aide error |
| 7. Hasty conclusions | 7a. Distinguish a statistical "confidence level" from an emotional "feeling of certainty"<br>b. Continue to pursue likely leads even if the initial data is not significant |
| 8. Unmultiplied dollars | 8a. Link every research variable to a learner or public benefit<br>b. Estimate the market; that is determine how many classrooms or other learning situations may benefit from the research in the five years following its completion<br>c. Seek out "hard data" to support these "guess-timates" |

OVERVIEW:

1. Serendipity ... it happened by accident
2. Intuition ... I just knew it
3. Authority ... we've always done it that way
4. Compromise ... give-and-take
5. Consensus ... pooling of ignorance
6. Scientific method ... public inspection of the books

1. Serendipty ... Charles Goodyear (1844) latex, sulfur, and vulcanization ... Alexander Fleming, bacteria, mold, and penicillin

2. Intuition ... hunch, vision, and discernment ... Bohr, dream, and atomic structure similar to solar system

3. Authority ... books, people, written or spoken word ... power, patterns, and prestige

4. Compromise ... give-and-take, agreement, and belief ...

5. Consensus ... Delphi technique ... participation, sharing, questioning, and details get worked out

6. Scientific Method ... 1-K-18 ... problem definition, alternative solutions, conflicting viewpoints, controls, and experiments

## THE TRANSITION TO RIGOROUS MEASUREMENT

Evaluation studies based upon the following variables are often accepted as rigorous and open to public inspection :

STUDENT JOB SATISFACTION
WAGES
TRAINING COST SAVINGS
JOB SKILL COMPETENCY EXAMS
EMPLOYER SATISFACTION
INDIVIDUAL GAINS SCORES

However, each of these variables presumes LONG TERM MEASUREMENT PROCEDURES.

The SHORT TERM measurements currently used often focus on SUBJECTIVE IMPACT MEASURES.

Such an evaluation model is obvious E = PJ, that is, EVALUATION AS PROFESSIONAL JUDGMENT.

There is nothing wrong with E = PJ evaluation AS LONG AS a broad spectrum of professional opinions are consulted. One wise man does not always come up with a wise conclusion unless exposed to the opinions of other wise men or experts.

While planning for rigorous measurement, it is necessary to realize that rigorous measurement can begin with E = PJ as well as with E = M, that is, EVALUATION AS MEASUREMENT.

CONCLUSION --- To make E = PJ an effective evaluation tool and worthy of respect,

make sure you consult several experts.

# BASIC CHECKLIST OF COMPONENTS IN A TYPICAL RESEARCH PROPOSAL

Howard P. ALVIR, Ph.D.

| COMPONENT | WHAT TO DO |
|---|---|
| PROBLEM | STATE the problem briefly<br>EXPLAIN its importance and significance |
| OBJECTIVES | STATE the hypotheses to be tested<br>EXPLAIN specific questions to be answered |
| OTHER RELATED RESEARCH | SUMMARIZE pertinent research<br>CITE sources of special importance<br>DISCUSS the proposed study as it relates to previous and ongoing research<br>SPECIFY how the proposed study will extend the body of knowledge and/or practice about the area<br>POINT OUT distinctive or unique aspects of the proposed research as compared with previous research |
| PROCEDURE | DESCRIBE all important procedures in detail<br>LIST the steps to be followed<br>SKETCH OUT a time line for each step<br>IDENTIFY the following :<br>POPULATIONS, SAMPLES, CONTROL GROUPS<br>EXPERIMENTAL DESIGN, METHODS, VARIABLES, CRITERIA, STATISTICS<br>DATA, QUESTIONNAIRES, INTERVIEWS, TESTS, INVENTORIES, INSTRUMENTS, PUBLICATIONS<br>ANALYSES, STATISTICAL AND OTHER ANALYSES, TREATMENTS, PROJECTIONS, AND USES<br>ALTERNATIVES, PLAN B IN CASE ALL ABOVE FAILS, OPTIONS, FORMATIVE EVALUATION<br>EXPECTED END PRODUCTS, FINAL REPORTS, TRANSPORTABLE ITEMS |
| OTHER INGREDIENTS | PERSONNEL, FACILITIES, DURATION, BUDGET, SUPPORT, AGENCIES, RELATED PROJECTS, AND FUNDING ANTICIPATIONS |
| FINAL PROOF | How will this project yield usable results in a reasonable period of time? Can it be used in a substantial number of similar activities? |

## PRODUCT ASSESSMENT

## DURING IN-SERVICE WORKSHOPS

### INTRODUCTION

Project monitors from several funding agencies reported that four high priority components of a project proposal were: goals, objectives, evaluation, and activities. Monitors further reported that, when the project goals, objectives, evaluation, and activities were clearly described, the rest of the proposal was usually developed quickly and effectively.

With this in mind, the Division of Continuing Education planned a workshop to describe, to explain, to develop, to self-evaluate, and to validate the above four project proposal components. Each of these components was presented during a two day workshop.

### WORKSHOP FORMAT

The following steps were repeated for each component,

STEP 1: Workshop presenters described, explained, and demonstrated each component. Workshop participants had the opportunity to react and ask questions.

STEP 2: Each workshop participant developed draft versions of each component using as guidelines the procedures and criteria explained in step 1.

STEP 3: Each participant self-evaluated the draft version using a checklist specially designed for each component.

STEP 4: Each participant again revised the draft version of each component.

STEP 5: Each participant presented the step 4 revision to the appropriate state monitor for reaction and review. The monitors used the same checklist as in step 3.

STEP 6: Each participant rewrote the project proposal component in light of the suggestions given in step 5.

STEP 7: Each participant resubmitted the final version for approval by the state monitor.

The checklists used for self-evaluation and objective third party evaluation are reproduced on the following four pages.

## ASSESSING PROJECT GOAL(S)

1. Is the project goal consistent with the goals and priorities of the funding agency?

   ____ YES ____ NO EVIDENCE:

2. Does the project goal address problems described in the proposal's statement of needs?

   ____ YES ____ NO EVIDENCE:

3. Does the project treat each of its distinct points of focus separately?

   ____ YES ____ NO EVIDENCE:

4. Does the goal avoid rationale, explanations and background information?

   ____ YES ____ NO EVIDENCE:

5. Does the goal avoid specifics that should be described in objectives and activities?

   ____ YES ____ NO EVIDENCE:

6. Does the project goal describe the population to be ultimately affected?

   ____ YES ____ NO EVIDENCE:

7. Is this population one that can be legitimately served with the special project funds?

   ____ YES ____ NO EVIDENCE:

8. Does the project goal describe the general behavior to be affected in this population?

   ____ YES ____ NO EVIDENCE:

9. Does the project goal describe the general means to be used to affect this behavior?

   ____ YES ____ NO EVIDENCE:

10. Does the description of means make clear which of the following processes will be used, i.e., research, needs assessment, development, adaptation, field-testing, dissemination?

    ____ YES ____ NO EVIDENCE:

## ASSESSING PROJECT OBJECTIVES

1. Does each goal have appropriate corresponding objectives?

   ____ YES ____ NO EVIDENCE:

2. Do objectives lead toward the attainment of the goal?

   ____ YES ____ NO EVIDENCE:

3. Do objectives describe major outcomes?

   ____ YES ____ NO EVIDENCE:

4. Does each objective deal with only one major outcome?

   ____ YES ____ NO EVIDENCE:

5. Have objectives, rather than procedural details, been specified?

   ____ YES ____ NO EVIDENCE:

6. Do the objectives describe specific standards for the outcomes?

   ____ YES ____ NO EVIDENCE:

7. Do the objectives specify deadlines for each outcome?

   ____ YES ____ NO EVIDENCE:

8. Do those objectives that lead to behavioral change describe who will be affected, what behavior will be affected and to what degree?

   ____ YES ____ NO EVIDENCE:

9. Are the objectives arranged in some appropriate order?

   ____ YES ____ NO EVIDENCE:

10. Do the objectives provide an adequate basis for the selection of appropriate activities and evaluation measures?

    ____ YES ____ NO EVIDENCE:

## ASSESSING PROJECT EVALUATION

1. Does each objective have appropriate corresponding evaluation items?

   ____ YES ____ NO EVIDENCE:

2. Do evaluation items seem likely to measure the attainment of the corresponding objective?

   ____ YES ____ NO EVIDENCE:

3. Do the evaluation procedures for each item describe what data is to be collected and how?

   ____ YES ____ NO EVIDENCE:

4. Does the evaluation for each objective specify criteria?

   ____ YES ____ NO EVIDENCE:

5. Are the performance levels or criteria realistic and appropriate?

   ____ YES ____ NO EVIDENCE:

6. Is the data to be collected adequate to determine if the objective has been achieved?

   ____ YES ____ NO EVIDENCE:

7. Does the evaluation for each objective describe how data will be analyzed?

   ____ YES ____ NO EVIDENCE:

8. Are the following data analysis design components present when appropriate:

   a. experimental group?
   b. control group?
   c. pretest?
   d. posttest?

   ____ YES ____ NO EVIDENCE:

9. Does the plan of data analysis appear valid?

   ____ YES ____ NO EVIDENCE:

10. Is provision made for formative evaluations to guide project management decisions?

    ____ YES ____ NO EVIDENCE:

## ASSESSING PROJECT ACTIVITIES

1. Does each objective have appropriate corresponding activities?

   ____ YES ____ NO EVIDENCE:

2. Do activities, as listed, seem likely to lead to the attainment of the corresponding objective?

   ____ YES ____ NO EVIDENCE:

3. Are activities dated and in chronological order?

   ____ YES ____ NO EVIDENCE:

4. Are activities visually depicted in a way that makes them easy to follow? (For example, a timeline or a flowchart.)

   ____ YES ____ NO EVIDENCE:

5. Do the timeframes for activities seem to be realistic?

   ____ YES ____ NO EVIDENCE:

6. Do activities indicate who will be responsible for completion?

   ____ YES ____ NO EVIDENCE:

7. Do the persons assigned responsibility for carrying out activities appear to have the necessary expertise?

   ____ YES ____ NO EVIDENCE:

8. Are all unnecessary, duplicative, overly expensive, too time-consuming, wasteful, or otherwise undesirable activities eliminated?

   ____ YES ____ NO EVIDENCE:

9. Do activities provide for data collection and analysis?

   ____ YES ____ NO EVIDENCE:

10. Do activities include preparing required reports? (Quarterly progress reports, final report, final claim.)

    ____ YES ____ NO EVIDENCE:

The following criteria are based upon the Federal Register, Volume 41, Number 26, Friday, February 6, 1976, pages 5392-3.

| Score | | | | Criteria |
|---|---|---|---|---|
| 20 | NEEDS AND PROBLEMS: | | | |
| | YES | NO | 101 | Does the application clearly define the need for the project? |
| | YES | NO | 111 | Does the application clearly define the need for the project within the specified consortium of states? |
| | YES | NO | 121 | Does the application indicate responsiveness to problems rather than symptoms? |
| | YES | NO | 131 | Has a systematic method of ferreting out key symptoms been identified? |
| | YES | NO | 132 | Has a logical analysis been applied to the information on symptoms? |
| | YES | NO | 141 | Has documentation been provided that clearly explains how problems were identified? |
| | YES | NO | 151 | Have problems been translated into recognized needs? |
| | YES | NO | 152 | Have institutional needs been recognized? |
| | YES | NO | 153 | Have administrative needs been recognized? |
| | YES | NO | 154 | Have teacher needs been recognized? |
| | YES | NO | 155 | Have student/parent needs been recognized? |
| | YES | NO | 156 | Have concerned community group needs been recognized? |
| | YES | NO | 161 | Has an adequate response been made to the needs? |
| | YES | NO | 162 | Have the needs been responded to realistically? |
| | YES | NO | 163 | Have the needs been responded to meaningfully? |
| | YES | NO | 164 | Have the needs been responded to all the way down the line? (institutional, administrative, teacher, student/parents, concerned community groups) |

| Score | | | | Objectives |
|---|---|---|---|---|
| 10 | YES | NO | 201 | Have the objectives been stated clearly? |
| | YES | NO | 211 | Are the objectives capable of being attained? |
| | YES | NO | 212 | Are the objectives capable of being attained by the proposed procedures? |
| | YES | NO | 221 | Are the objectives capable of being measured? |
| | YES | NO | 222 | Are the objectives capable of being measured by the proposed evaluation design? |

| Score | | | | Plan |
|---|---|---|---|---|
| 20 | YES | NO | 301 | Does the management plan show the functions to be performed? |
| | YES | NO | 311 | Does the management plan show the services to be provided? |
| | YES | NO | 321 | Does the management plan delineate the procedures for accomplishing each function to be performed? |
| | YES | NO | 322 | Does the management plan delineate the procedures for accomplishing each service to be provided? |

| Score | | | | Results |
|---|---|---|---|---|
| 20 | YES | NO | 401 | Does the proposal identify proposed outcomes? |
| | YES | NO | 411 | Does the proposal describe proposed outcomes? |
| | YES | NO | 412 | Does the proposal describe proposed outcomes in terms of potential impact? |
| | YES | NO | 413 | Does the proposal describe proposed outcomes in terms of potential impact at the national level? |
| | YES | NO | 414 | Does the proposal describe proposed outcomes in terms of potential impact at the state level? |
| | YES | NO | 415 | Does the proposal describe proposed outcomes in terms of potential impact at the local level? |
| | YES | NO | 421 | Does the proposal identify outcomes in terms of the overall program purposes? |
| | YES | NO | 431 | Does the proposal identify proposed outcomes in terms of cost effectiveness? |
| | YES | NO | 441 | Does the proposal identify proposed outcomes in terms of efficiency? |

| Score | | | | Institutional Capabilities |
|---|---|---|---|---|
| 15 | YES | NO | 501 | Does the application clearly set forth current curriculum strengths of the applicant? |
| | YES | NO | 511 | Does the application clearly set forth the capability of the applicant immediately to iniate and maintain liaison functions with consortium states? |
| | YES | NO | 521 | Does the application clearly set forth the past track record of the applicant in maintaining liaison functions with consortium states? |

| Score | | | | Personnel |
|---|---|---|---|---|
| 10 | YES | NO | 601 | Are the qualifications of key staff appropriate to the requirements of the project? |
| | YES | NO | 611 | Are the experience backgrounds of key staff appropriate to the requirements of the project? |
| | YES | NO | 621 | Have specific responsibilities been identified for each of the key staff? |
| | YES | NO | 631 | Does at least one key staff person devote a minimum of 50% of his/her time to the project? |

| Score | | | | Budget |
|---|---|---|---|---|
| 5 | YES | NO | 701 | Has an estimated cost been provided for the project? |
| | YES | NO | 711 | Is the estimated cost reasonable? |
| | YES | NO | 712 | Is the estimated cost reasonable in relation to anticipated results? |
| | YES | NO | 713 | Is the estimated cost reasonable in relation to the geographical area? |
| | YES | NO | 714 | Is the estimated cost reasonable in relation to the scope of the project? |
| | YES | NO | 715 | Is the estimated cost reasonable in relation to the duration of the project? |

AN EXAMPLE OF
FEDERAL CRITERIA ---------- GENERAL CRITERIA

Each FEDERAL REVIEW of a proposal concerns itself with both GENERAL CRITERIA and CRITERIA SPECIFIC TO AN INDIVIDUAL PROPOSAL AREA.

The following extract from the FEDERAL REGISTER gives an example of maximum weights for common components of GENERAL CRITERIA :

| *Criteria:* | *Maximum score* |
|---|---|
| (1) *Priority Area*—Application is focused on the announced priority area. | 15 |
| (2) *Need*—Application clearly defines the needs for the project or program and delineates the training required to be responsive to those needs. | 15 |
| (3) *Objectives*—The objectives of the proposed project or program are sharply defined, clearly stated, capable of being attained by the proposed procedures and provisions are made for adequate evaluation of the project or program. | 15 |
| (4) *Plan*—The application clearly describes the general scope and design for the project or program. The procedures specify in detail how each objective will be accomplished, and an adequate project management plan is available. If appropriate, include inservice training, evaluation procedures and dissemination plans. | 20 |
| (5) *Results*—The proposed results of the training are identified and described. | 10 |
| (6) *Personnel*—The qualifications and experience of personnel are appropriate for the proposed project or program. | 10 |
| (7) *Institutional Commitment*—The application shows reasonable evidence of commitment to provide adequate curriculum facilities, equipment and provides documented assurance of support from cooperating institutions and agencies when necessary for project or program success. | 5 |
| (8) *Budget*—The estimated cost is reasonable in relation to anticipated results, and the size, scope, and duration of the project or program are reasonable. | 10 |

[40 FR 18788, Apr. 30, 1975]

## OTHER EXAMPLES OF CRITERIA

(For use by State Education Departments)

### GENERAL

Sec. 5.7 *Criteria for review of project applicants.*

The State educational agency should establish, publish in the annual program plan, and disseminate the criteria to be used in reviewing project applications from local educational agencies, public and private organizations, or individuals. Such criteria should be applied in conjunction with the criteria developed under §§ 166.12, 166.13 and Appendix B of the regulations contained in 45 CFR Part 166. The value to be assigned to each of the applicable criteria shall be the responsibility of the State.

(a) *General criteria.* It is recommended that the following general criteria be utilized in evaluating both special projects and teacher training applications:

(1) Objectives are sharply defined, clearly stated, capable of being attained by the proposed procedures, and capable of being measured;

(2) Proposed plan of operation is sound;

(3) Proposed activity is relevant to the priority or needs addressed;

(4) Proposed activity is needed in the area to be served by the applicant;

(5) Designated project personnel possess qualifications and experience to adequately carry out project activities;

(6) Facilities and other resources are adequate to carry out the objectives of the project;

(7) Size, scope, and duration of the project would secure productive results, and the estimated cost is reasonable in relation to these results;

(8) Potential for replication and utilization of the results of the project in other adult education programs and the provisions for disseminating these results are judged to be adequate;

(9) Provisions are included for an adequate evaluation of the project's effectiveness and for determining the extent to which its objectives are accomplished.

### SPECIFIC

(b) *Special projects.* In evaluating applications for special projects, it is suggested that the State educational agency give consideration to such factors as whether and to what extent the project:

(1) Involves the use of innovative methods, systems, materials, or programs and which may have national significance and will serve residents of the State or be of special value in promoting effective programs under the Act;

(2) Is to be carried out in cooperation with other federally assisted State, or local programs which have unusual promise in promoting a comprehensive or coordinated approach to the problems of persons with educational deficiencies;

(3) Is designed to address critical educational needs which have been identified as State or national priorities for adult education;

(4) Has unusual promise for the development of concepts, practices, and techniques which can be adapted or adopted elsewhere in establishing or improving adult education;

(5) Is related to and is carried out in cooperation with appropriate training activities whether or not assisted under the Act;

(6) Will result in the development of materials and methods which may be of value in increasing the effectiveness of adult education programs;

(7) Provides for cooperation and coordination with business and industry, labor and other agencies, institutions, and community education programs and other related programs, as identified in § 166.13 of the regulations, in order to strengthen the project and prevent duplication of effort;

(8) Provides, where appropriate, for cooperation and continuation by the local educational agencies and other public and private agencies; and

(9) Will strengthen the adult education delivery systems within the State.

(c) *Teacher training.* In evaluating applications for training grants, it is suggested that the State educational agency give consideration to such factors and whether as to what extent the project—

(1) Is consistent with the objectives set forth in the annual program plan for the development and training of adult education personnel;

(2) Will include training in the utilization and development of innovative methods, systems, materials, or programs;

(3) Will meet local needs for adult education personnel;

(4) Is designed to address critical training needs which have been identified as State or national priorities for adult education;

(5) Provides for periodic, systematic, and objective reviews and evaluations of the project;

(6) Is coordinated with appropriate special experimental demonstration projects which may be operating in the geographic area served by the applicant;

(7) Is coordinated with adult education programs being sponsored in the State in which the applicant is located or with a consortium of the States from which trainees are drawn or to which trainees may be expected to return;

(8) Is to be carried out in cooperation with other federally assisted, State, or local programs;

(9) Provides for cooperation and coordination with business and industry, labor and other agencies, as identified in § 166.13 of the regulations, to strengthen the project and prevent duplication;

(10) Provides for cooperation and continuation by the local educational agencies and other public and private agencies; and

(11) Includes criteria for eligibility for participation in the project.

(20 U.S.C. 1208; 45 CFR 166.24)

CRITERIA FROM

45 CFR 166 APPENDIX C

ANOTHER EXAMPLE OF GENERAL CRITERIA

Title 45—Public Welfare

Chapter I—Office of Education

**§ 100a.26 Review of applications.**

(a) The Commissioner, prior to disposition of applications for grants or contracts, shall have discretion to obtain the review of a panel of experts (except where review by such a panel is required by statute). Any such review will be in addition to the review of an application by the Commissioner in accordance with such procedures as he may establish.

(b) Review by the Commissioner and by the panel of experts will take into account the following factors (in addition to such other criteria as may be prescribed by statute or regulation):

(1) The need for the proposed activity in the area served or to be served by the applicant;

(2) Relevance to priority areas of concern as reflected in provisions contained in the applicable Federal statutes and regulations;

(3) Adequacy of qualifications and experience of personnel designated to carry out the proposed project;

(4) Adequacy of facilities and other resources;

(5) Reasonableness of estimated cost in relation to anticipated results;

(6) Expected potential for utilizing the results of the proposed project in other projects or programs for similar educational purposes;

(7) Sufficiency of size, scope, and duration of the project so as to secure productive results; and

(8) Soundness of the proposed plan of operation, including consideration of the extent to which:

(i) The objectives of the proposed project are sharply defined, clearly stated, capable of being attained by the proposed procedures, and capable of being measured;

(ii) Provision is made for adequate evaluation of the effectiveness of the project and for determining the extent to which the objectives are accomplished;

(iii) Where appropriate, provision is made for satisfactory inservice training connected with project services; and

(iv) Provision is made for disseminating the results of the project and for making materials, techniques, and other outputs resulting therefrom available to the general public and specifically to those concerned with the area of education with which the project is itself concerned.

(20 U.S.C. 1221c(b)(1).)

**§ 167.14 Program evaluation procedures.**

Each program or project proposal shall, where appropriate, as determined by the Commissioner, include an evaluation plan to be carried out by a third party for the purpose of evaluating the effectiveness of the program or project. If such plan is included, it should describe the steps by which the grantee will

(a) Determine the extent to which the objectives of the program or project have been accomplished;

(b) Determine what factors either enabled or precluded the accomplishment of these objectives; and

(c) Promote the inclusion of the successful aspects of the program or project into adult education programs supported with funds other than those provided under the grant.

(20 U.S.C. 1208; 1221c(b)(1))

ANOTHER EXAMPLE OF
FEDERAL CRITERIA
SPECIFIC TO AN INDIVIDUAL PROPOSAL AREA

The following criteria from 45 CFR 167.8 are specific to continuing and adult education special projects :

**§ 167.8 Special project criteria.**

In evaluating applications for special project grants, in addition to considering the factors stated in § 100a.26(b) of this Chapter, the Commissioner will give consideration to such factors as:

(a) Whether and to what extent the project involves the use of innovative methods, systems, materials, or programs which may have national significance or be of special value in promoting effective programs under the Act;

(b) Whether and to what extent the project is to be carried out in cooperation with other federally assisted, State or local programs which have unusual promise in promoting a comprehensive or coordinated approach to the problems of persons with educational deficiencies;

(c) Whether and to what extent the project has unusual promise in establishing or improving adult education;

(d) Whether and to what extent the project is related to and is carried out in conjunction with appropriate teacher training, whether or not assisted under the Act;

(e) Whether and to what extent the project will result in the development of new materials and methods which may be of value in increasing the effectiveness of adult education programs.

(f) Whether and to what extent the project provides for cooperation and coordination with business and industry, labor and other agencies, institutions, and community resources in order to strengthen the project and prevent duplication of effort;

(g) Whether and to what extent the project provides for cooperation and continuation by the State and local educational agencies; and

(h) Whether and to what extent the project will meet the needs of persons with particular educational deficiencies

(20 U.S.C. 1208(c); 1221c(b)(1))

AN EXAMPLE OF
FEDERAL CRITERIA
SPECIFIC TO AN INDIVIDUAL PROPOSAL AREA

The following criteria from 45 CFR 167.9 are specific to continuing and adult education teacher training projects :

**§ 167.9 Teacher training project criteria.**

In evaluating applications for teacher training grants, in addition to considering the factors stated in § 100a.26(b) of this chapter, the Commissioner will consider such factors as:

(a) Whether and to what extent the project will include training in the utilization and development of innovative methods, systems, materials, or programs;

(b) Whether and to what extent the project will meet local needs for adult education personnel;

(c) Whether and to what extent the project can be expected to meet needs for adult education personnel beyond the geographic region in which the applicant is located;

(d) Whether and to what extent the applicant proposes to make periodic, systematic, and objective reviews and evaluations of the adult education personnel training project in addition to those referred to in § 167.17(b)(3);

(e) Whether and to what extent the project is coordinated with any special experimental demonstration projects which may be operating in the geographic area served by the applicant;

(f) Whether and to what extent the project is coordinated with adult education programs being sponsored in the State in which the applicant is located or with any other State from which trainees are drawn or to which trainees may be expected to return;

(g) Whether and to what extent the project is to be carried out in cooperation with other federally-assisted State or local programs;

(h) Whether and to what extent the project provides for cooperation and coordination with business and industry, labor and other agencies, institutions, and community resources to strengthen the project and prevent duplication;

(i) Whether and to what extent the project provides for cooperation and continuation by the State local educational agencies; and

(j) Whether and to what extent the criteria for eligibility for participation in the project include, in addition to educational background, previous preparation and experience in adult education programs.

(20 U.S.C. 1208(c); 1221c(b)(1))

## DEFINITIONS

From one act to another, common words such as EVALUATION and PLANNING can take on very specific meanings. Here is an example from the FEDERAL REGISTER cross-referenced to the CODE OF FEDERAL REGULATIONS (CFR).

Title 45—Public Welfare

Chapter I—Office of Education

PART 107—FEDERAL FINANCIAL ASSISTANCE FOR PLANNING AND EVALUATION

§ 107.1 Definitions.

As used in this part:

(a) "Act" means the Elementary and Secondary Education Amendments of 1967 (Public Law 90-247).

(b)-(c) [Reserved]

(d) "Evaluation" means determining the extent to which management and program objectives are being achieved, using measures of efficiency and effectiveness to compare results with predetermined standards.

(e) [Reserved]

(f) "Planning" means a series of activities involving assessing needs, defining objectives, identifying problems, establishing priorities, examining alternative solutions, selecting possible approaches, and formulating action programs, including strategies for their evaluation, to achieve specified goals.

(g) [Reserved]

(h) "State" means, in addition to the several States of the Union, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the Virgin Islands, and the Trust Territory of the Pacific Islands.

(i) "State educational agency" means the State board of education or other agency or officer primarily responsible for the State supervision of public elementary and secondary schools, or, if there is no such officer or agency, an officer or agency designated by the Governor or by State law.

[35 FR 7802, May 22, 1970, as amended at 38 FR 30658, Nov. 6, 1973]

PRIORITIES FROM

45 CFR 166

APPENDIX B

APPENDIX C

APPENDIX B

PRIORITIES FOR PROGRAMS OF NATIONAL SIGNIFICANCE

The Commissioner has suggested for the guidance of State educational agencies that the following priorities merit special consideration by States in meeting the special project and staff development needs of their adult education program.

1. *Dissemination in adult education.* Administrators and practitioners of adult education have only limited means for learning of and assessing the kinds and quality of improved practices and products generated in adult education. Many States do not have a mechanism for systematic retrieval, review, assessment, and diffusion of improved practices and products. Without these capabilities, programs suffer from duplication of effort, lack of planning ability, and the continuation of traditional, non-progressive educational strategies.

Characteristics of such a mechanism include the ability to locate improved practices and products, identify specific users, disseminate the practices and products to these users, and provide training and technical assistance for adoption and implementation by local adult educators. A Statewide dissemination program would develop these capabilities as part of the overall State Department of Education concern and planning for dissemination in education. If no such effort is presently being undertaken by a particular State Department of Education, the adult education program could play an important leadership role in developing departmental interest in a Statewide dissemination system. It will also be useful for State systems to coordinate plans and activities with the U.S. Office of Education, Clearinghouse on Adult Education.

2. *Adult performance level implementation.* By the end of fiscal year 1975, the Adult Performance Level (APL) test and objectives will be completed and available for implementation. States should plan to utilize section 309 and other funds in support of projects to conduct a Statewide literacy assessment and to develop instructional programs designed to meet APL objectives. Also encouraged are staff development or special projects which focus on the translation of APL objectives into curriculum and teacher competencies. Careful attention should be paid to the avoidance of overlap and duplication in these developments.

3. *Role of the employer in adult learning.* At the 1974 Summer Commencement of Ohio State University, the President asked the students and faculty to help bring the domains of education, employment and labor closer together to foster a community of learning. A major aim of this endeavor is to release the intellectual energy of America's youth to stimulate greater productivity on and off the job.

Adult educators can assist this effort by developing programs which identify the educative aspects of work and which structure the work environment and personnel policies to facilitate adult learning and career development. This may require restructuring the responsibilities of the employee to provide opportunities to learn new knowledge and skills which will prepare the employee to assume more or different job responsibilities.

This concept assumes that the organization of production around learning experiences for employees will ultimately lead to increased cost effectiveness of that production system.

4. *Adult education staff development.* As part of the continuing staff development effort, each region and State has developed an adult education staff development plan. It is recommended that each State continue the implementation of its plan, and carefully assess the desirability of supporting the continuation of a regional approach to staff development.

5. *Experimental and demonstration project continuation.* States are encouraged to review current experimental and demonstration projects funded under Pub. L. 91-230 in fiscal year 1974 to determine the appropriateness of assuming support for those projects which are of significance to State Adult Education Programs.

SEC. 5.6 *Establishment of national priorities in adult education.*

(a) Based on the findings of surveys and studies conducted by the U.S. Office of Education, recommendations of the National Advisory Council on Adult Education, and on evaluations by State educational agencies, State advisory councils, and other appropriate information bases, the U.S. Office of Education will annually review and identify national priorities in the field of adult education and, as necessary, will publish current priorities in the FEDERAL REGISTER. In establishing its priorities, the State educational agency may take the national priorities into consideration in the development of the annual program plan. Such priorities are contained in the regulations (45 CFR Part 166) as Appendix B.

(b) In soliciting applications for special projects and adult education personnel training programs, it is recommended that the State educational agency identify and publish, annually, statewide adult education program priorities and evaluation criteria which have been determined in accordance with the requirements contained in the regulations at 45 CFR 166.25. The annual program plan should identify the organizational unit and official(s), by title, that are responsible for establishing procedures for and the identification of program priorities for any given fiscal year.

(c) In order to assure that all interested persons and organizations in all segments of the adult education community throughout the State are aware of the availability of Federal funds for support of special projects and teacher training programs, wide circulation of the announcement of program priorities and criteria is necessary. All Federal funds are to be distributed equitably among the applicants solely on the basis of merit. Therefore, the State educational agency is urged to establish procedures which will provide maximum open and free competition to assure that all citizens of the general public have an equal opportunity to compete for the available Federal funds. The State educational agency is urged to establish procedures for the award of grants as well as contracts which adhere to the procurement standards set forth in subpart I of GEPR. However, when contracts are used as the funding mechanism for awarding Federal funds, the State educational agency must adhere to the requirements of Subpart I of GEPR.

(d) In evaluating applications for special projects and adult education personnel training programs, the State educational agency is encouraged to give special emphasis to applications judged as having a potential for national significance.

(20 U.S.C. 1208; 45 CFR 166.12(b)(4))

SEC. 3.7 *Program evaluation.*

(a) *Monitoring of program activities.* The annual program plan should contain a statement which sets forth the policies, procedures and practices of the State educational agency for assuring that the performance of adult education programs assisted under the Act are constantly monitored to assure adequate progress is being made toward achieving the goals of the grant. As required by § 100b.431 of GEPR, these reviews shall be made for each function or activity of each grant as set forth in the annual program plan.

Each State educational agency is strongly urged to monitor and report on not less than 10 percent of the adult education programs each year. The State educational agency should establish and set forth in the annual program plan the sampling procedures to be used for selecting the 10 percent of the total adult education projects to be monitored and reported on annually, and for excluding from the current sample those projects which have been examined as a part of this effort during a preceding fiscal year. For each program that is examined, a report should be prepared and submitted to the U.S. Commissioner of Education, as authorized under § 166.12(b)(4) of the regulations and section 434(b) of the General Education Provisions Act.

In establishing procedures for instituting the monitoring and reporting system, consideration should be given in the sampling procedures to examining the adult education programs which serve the largest number of adults.

(b) *Evaluation of selected program issues.* In accordance with § 166.12(b)(4) of the regulations, the State educational agency should set forth in the annual program plan the procedures which the State educational agency will use to conduct evaluations of all activities under section 306 and 309 of the Act. The State educational agency may wish to evaluate local educational programs directly or use third-party evaluators. However, for the purpose of conducting an evaluation study of the State adult education program, it is recommended that the State educational agency contract with a third party for such services.

The following issues are suggested for consideration for evaluation studies:

(i) Are local programs of instruction designed in harmony with and in response to the findings of adult learning needs surveys and to what degree are they supportive of the consideration that special program emphasis be given to adult basic education?

(ii) Are local programs of instruction reviewed on a recurring basis? This is very important, since the State educational agency or the USOE Regional Office may be able to provide technical assistance which could strengthen the program.

(iii) Is systematic staff development taking place within local programs?

(iv) Have the evaluation studies conducted by the State educational agency included administrative and management components, such as maintaining adequate financial records, systematically providing for program audits, and retention of records?

(v) Have the regulations for the Adult Education program (which includes the State-Federal agreement and the national priorities) and the General Education Provisions Regulations been distributed to all participating agencies?

(vi) How successful has the State been in reaching the adult disadvantaged adults (i.e., persons who have completed not more than five grades of schooling) into the program? What is the participant dropout rate in adult basic education programs? In adult secondary education programs?

(vii) What State and/or local efforts, if any, have been made to upgrade the level of instruction and to improve overall program efficiency, including the incorporation of innovative methods and techniques?

(viii) To what extent, if any, are special projects and teacher training activities coordinated on a statewide basis? regional national?

(ix) To what extent are guidance and counseling services available to participants in adult education programs assisted under the Act?

(x) What percentage of the program participants receive guidance and counseling services? In the adult basic education program? In the adult secondary education program?

(xi) To what extent, if any, are follow-up studies conducted to determine program effectiveness in terms of serving the goals and needs of the participants.

(20 U.S.C. 1205(a); 45 CFR 166.12(b)(4); 45 CFR Part 100b, Subpart Q)

SEC. 3.8 *Annual program plan format.*

The annual program plan must set forth a statement describing the purposes for which Federal funds allotted to a State under section 305 of the Act will be expended during the fiscal year for which the annual program is submitted. In presenting the requirements of the annual program plan, as prescribed by section 434 of GEPA and the regulations at §§ 166.12 and 166.13, a State educational agency may wish to prepare its plan along the lines of the following format:

(a) *General program goal statements.* This portion of the plan should contain a brief introductory overview of the general program goals.

(b) *Needs survey and resource inventory.* This portion of the plan should contain a description of the conclusions of a needs survey and a resource inventory, including information and planning charts such as those discussed in section 3.2 and 3.3.

(c) *Specific program priorities and objectives.* This portion of the program plan should describe the specific program objectives which reflect priorities established in accordance with section 3.4 of these guidelines. Examples of suggested program objectives are to:

(1) Review project applications to assure their compliance with Federal and State guidelines;

(2) Provide _____ on-site visits by State agency staff for technical assistance;

(3) Provide _____ on-site visits in connection with the annual monitoring of at least 10 percent of the adult education programs;

(4) Provide _____ pre-service and in-service training activities;

(5) Establish a State advisory council which will meet _____ times a year.

(6) Increase enrollments in adult basic education programs by _____ for an increase of _____ percent;

(7) Increase enrollments in adult secondary education programs by _____ for an increase of _____ percent;

(8) Establish _____ programs for institutionalized persons for an increase of _____;

(9) Establish _____ bilingual adult education programs for an increase of _____ percent;

(10) Establish _____ programs in cooperation with community school programs for an increase of _____ percent;

(11) Establish _____ programs in cooperation with business and industry for an increase of _____ percent;

(12) Add _____ new programs during the program year; and

(13) Complete and submit required reports by the deadline date.

(d) *Activities and procedures.* Describe the activities and procedures to be used to address each priority or objective. It is suggested that each priority or objective be discussed individually. (Where appropriate, utilize the suggestions and planning charts referred to in section 3.2.)

(e) *Evaluation.* This portion of the annual program plan may include a discussion of evaluation activities, including:

(1) Evaluation activities proposed to be conducted in the year for which the annual program plan is submitted (see section 3.7); and

(2) The extent to which completed evaluation studies have indicated strengths and weaknesses that have affected the design of the currently proposed activities and procedures.

(20 U.S.C. 1205, 1208, 45 CFR 166.11, 12, 13 and 20)